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Integral analogues of almost sure limit theorems

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Abstract

An integral analogue of the general almost sure limit theorem is presented. In the theorem, instead of a sequence of random elements, a continuous time random process is involved, moreover, instead of the logarithmical average, the integral of delta-measures is considered. Then the general theorem is applied to obtain almost sure versions of limit theorems for semistable and max-semistable processes, moreover for processes being in the domain of attraction of a stable law or being in the domain of geometric partial attraction of a semistable or a max-semistable law. © Akadémiai Kiadó, Budapest.

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